

WHAT IS CLAIMED IS:

1. A combustion method for NO_x reduction by controlling temperature of combustion gas derived from a burner, comprising in combination the steps of:

5 suppressing combustion gas temperature by heat absorbers;

suppressing combustion gas temperature by recirculating burning-completed gas to a combustion-gas burning reaction zone; and

10 suppressing combustion gas temperature by adding water or steam to combustion-use air of the burner,

whereby the combustion gas temperature is suppressed.

2. A combustion method for NO_x reduction as claimed
15 in claim 1, further comprising in combination the step of suppressing combustion gas temperature by burning the burner as a fully-premixing type burner at a high excess air ratio.

3. A combustion apparatus for NO_x reduction by
20 controlling temperature of combustion gas derived from a burner, comprising:

first suppression means for suppressing combustion gas temperature by heat absorbers provided in a burning reaction zone;

second suppression means for suppressing combustion gas temperature by recirculating burning-completed gas to the combustion-gas burning reaction zone; and

5 third suppression means for suppressing combustion gas temperature by adding water or steam to combustion-use air of the burner.

4. A combustion apparatus for NO_x reduction as claimed in claim 3, further comprising, in combination,
10 fourth suppression means for suppressing combustion gas temperature by burning the burner as a fully-premixing type burner at a high excess air ratio.